



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,193	12/12/2001	Mai Huong Dang	52200.8010	5901
22918	7590	09/20/2006	EXAMINER	
PERKINS COIE LLP P.O. BOX 2168 MENLO PARK, CA 94026			PADGETT, MARIANNE L	
			ART UNIT	PAPER NUMBER

1762

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/017,193

Applicant(s)

DANG ET AL.

Examiner

Marianne L. Padgett

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 11,16-19,27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-15, 20-26, 29-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1762

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/3/2006 has been entered.

It is noted that only arguments, and no amendment were filed with the RCE.

2. Claim 7 remains rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have cited [0075] in the published application as support (there are NO paragraph numbers in the scanned file, hence for proper showing on the record applicants should cite support in the specification as filed, which also avoids wasting the examiner's time &/or paper in determining where it really is in the file &/or printing out unnecessary paper). The cited paragraph, which is actually the paragraph bridging pages 10 and 11, is directed towards solutions, hence the volume percentages in solutions tested provides absolutely no support for the percentage of carrier gas in gas or vapor in the plasma, as these are not analogous states of matter, hence there is no reason for the means of measurement for percentages used for solution to be the same as those used for gases. Therefore, applicants' arguments for support are totally unconvincing.

The examiner's review of the specification for such support only found disclosures on pages 4 & 9 for such gas percentages that did not provide any basis for how they were calculated, thus did not provide support for "by volume", hence lacking a showing of support it must remain considered New Matter.

Art Unit: 1762

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1762

4. Claims 1-9, 21-26 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikada et al (4,743,258), as discussed in section 8 of the 7/18/2003 action, and section 7 of the 4/15/2004 action; in view of Yializis et al (6,118,218) or Krause et al (5,500,257), is discussed in section 5 of 4/29/2005 rejection.

Applicant's discussion of Ikada et al. (page 5-6, bridging paragraph) alleges no stable functional groups, but provides no support or evidence that the functional groups formed in the cited example are not stable within the broad meaning of this limitation. The reactive species (radicals or peroxides) mentioned by applicant correspond to those in applicants' step (a), and are not relevant to arguments concerning the stable functional groups of step (b) in the manner presented by applicant. Furthermore, by applicant's reasoning on page 8 of their response, it would appear that any functional group that ever reacts cannot be considered stable, therefore by their own reasoning applicant's own claims would be considered nonfunctional, since they require their "stable functional group" to be able to react! Also note that the immersion step of Ikada et al. can read on step 1(b) as previously discussed.

5. Claims 1-2, 5, 7, 25-26 and 29-30 (31) are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudimenko et al (2003/0021996 A1), in view of Yializis et al , discussed in sections 5-6 of the 4/29/2005 rejection.

Applicants' page 9 arguments with respect to Gudimenko et al. again argue against stable functional groups, in this case against the hydrogen containing functional groups being stable, because they can react with subsequent lease applied Si-containing groups, but again this reasoning is not commensurate scope with the limitations of applicant's own claims that require such reactions to be able to occur with the "stable" functional group.

6. With respect to claims 1-2, 5-7 and 25 that were rejected over O'Brien (6,709,718 B2), in view of Yializis et al, or visa versa, as discussed in section 7 of the 4/29/2005 rejection, it is noted that while applicant's arguments are calling the reactive species the functional groups, so that the

Art Unit: 1762

arguments are not totally convincing, that the subsequent exposure to solution as an example is 3+ may or may not provide stability as claimed, as the examiner will agree that there is not necessarily any further reaction with the solutions applied in these examples (but neither is reaction to form what could be called "stable" functional groups excluded). Therefore, since the exposure to solution cannot be said to necessarily cause further reaction, this rejection is withdrawn.

7. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Kunz et al (6,733,847 B2), as discussed in section 8 of the 4/29/2005 rejection.

Claims 7 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunz et al, as discussed in section 8 of the 4/29/2005 rejection.

On the paragraph bridging pages 3-4 of the 7/3/2006 response, applicants allege that Kunz et al. do not create stable functional groups, however the patent results are "strongly adherent", thus clearly stable. Applicant's limitations do NOT limit WHEN the conditions create the stability, hence are considered to broadly encompass the teachings of Kunz et al.

8. Claims 1-10, 12, 21-23, 26 and 29-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 and 11-17 of U.S. Patent No. 6,159,531 (Dang et al), in view of Yializis et al, and further in view of Ikeda et al (258) in claims 3-6, as discussed in section 10 (& 9) of the 4/29/2005 rejection.

The broader claims of this application encompass the narrower claims of the patent is due to the broad terms in this application which in compass the narrower meaning is of the patented terms, which can be considered stable functional groups.

9. Claims 13-15 and 20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 & 11-17 of U.S. Patent No. 6,159,531 in view of Yializis et al, in view of Ikada et al ('258), as applied above in section 10, and further in view of

Art Unit: 1762

Valentini (6,428,579 B1) or Clapper (5,744,515), discussed in sections 6 & 11 of the action mailed 7/18/2003 & 4/29/05.

The broader claims of this application encompass the narrower claims of the patent is due to the broad terms in this application which encompass the narrower meaning is of the patented terms, which can be considered stable functional groups.

10. Claims 1-5, 7-10, 12, 20-24, 26 and 29-30 (31) are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian (5,643,580) in view of Yializis et al, as discussed in section 12 of the 4/29/2005 rejection.

Applicants' claims do NOT limit the form of the functional group after reaction to stabilize, hence are inclusive of reacting with the bioactive agent, as the group formed thereby is stable in the sense encompassed by the claim limitation. If applicant's desire the stable functional groups to be in some specific or particular form, they will need to provide limitations that narrow what forms are included, so that the scope that they intend can be determined.

11. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian ('580) in view of Yializis et al as applied to claims 1-5, 7-10, 12, 20-24 and 29-31 above, and further in view of Valentini or Clapper, as discussed in section 13 of the 4/29/2005 rejection & above in section 10.

13. Applicant's arguments filed 7/3/2006 & discussed above have been fully considered but they are not persuasive.

Applicants appear to believe that their invention provides significantly different process and/or mechanisms from the prior art as applied, however the claims as written do NOT necessitate due to applicants brought limitations any clear on obvious distinction, especially as "stable functional group" cannot be interpreted to mean on reactive, without disabling applicants' own claims.

14. This is a RCE of applicant's earlier Application No. 10/017,193. All claims are drawn to the same invention claimed in the application in the 1/3/2006 final rejection and could have been (were)

Art Unit: 1762

finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.



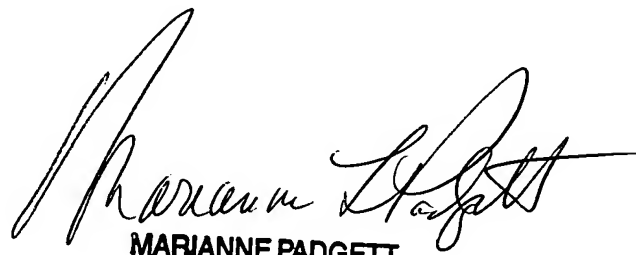
Art Unit: 1762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLP/dictation software

9/18/2006



MARIANNE PADGETT  
PRIMARY EXAMINER